

FY 2022 Small-Scale Water Efficiency Projects

Arizona

Buckeye Water Conservation and Drainage District, Installation of Relief Drainage and Automated Gate System on Lateral 44 Project

Reclamation Funding: \$100,000 Total Project Cost: \$219,993

The Buckeye Water Conservation and Drainage District, located in central Arizona, will install two solar-powered automatic, supervisory control and data acquisition (SCADA) controlled gates on Lateral 44. The installation and automation of the gates will minimize flooding hazards to local residential development, reduce breaching of the main canal, and improve the management and efficiency of the water system. The project addresses the goals and objectives to automate the irrigation system identified in the district's Water Conservation Plan.

Central Arizona Irrigation and Drainage District, Automated Control Gate Installation - Phase 1A

Reclamation Funding: \$100,000 Total Project Cost: \$219,399

The Central Arizona Irrigation and Drainage District, located in southern Arizona, will install three automated control gates, each with supervisory control and data acquisition control. These gates will be connected to a SCADA system, allowing operators to monitor and automatically adjust flow rates to help reduce spills and provide the district with accurate flow rate information to schedule deliveries. The project will help the district accomplish priorities identified by its Water Conservation Plan, including identifying ways to meet changing conditions with new strategies and technologies.

City of Bullhead City, Water Meter Conversion Metering Project
Reclamation Funding: \$100,000 Total Project Cost: \$207,972

The City of Bullhead City, located in northwest Arizona, will upgrade 25 residential and commercial water meters with advanced metering infrastructure capable water meters. The addition of AMI infrastructure will allow the city to conserve water and give customers easy access to water use data, including near real-time alerts to make informed water use decisions and take timely action to address leaks and unexpected consumption. This project supports the City of Bullhead City's 2022 Water Conservation Plan.

Maricopa-Stanfield Irrigation and Drainage District, Santa Rosa Canal Lateral WC Turnout Gate Replacement Project

Reclamation Funding: \$89,000 Total Project Cost: \$184,006

The Maricopa-Stanfield Irrigation and Drainage District, located in Arizona, will upgrade an existing turnout gate with a new automated gate with integrated flow measurement. The new gate will help the district eliminate spills, provide ongoing accurate flow measurement, and improve the irrigation system's overall water management. The project will help them accomplish their Water Conservation Plan priority goals related to creating water system resiliency, and irrigation system modernization and improvement.

Mayer Domestic Water Improvement District, Water Meter Upgrade and Radio Read Project

Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The Mayer Domestic Water Improvement District, located north of Phoenix, will replace and upgrade water meters with radio-read transmitters and integrate them into the district's billing system. The project will allow the district to automate and more accurately collect meter readings resulting in decreased water loss and unaccounted water. The district's Water Conservation Plan identifies the goal of water conservation and accurate billing.

Paloma Irrigation and Drainage District, Automated Control Gates Project Reclamation Funding: \$100,000 Total Project Cost: \$215,797

The Paloma Irrigation and Drainage District, located in southwestern Arizona, will install three new automated, supervisory control and data acquisition controlled turnout gates within the Gila Bend Main Canal. These solar-powered gates will be connected to an existing SCADA system and allow for constant monitoring and automatic adjustment of flow rates. The project will allow the district to address priorities identified in the district's Water Conservation Plan.

Town of Taylor, Water Meter Replacement - Phase 2 Reclamation Funding: \$100,000 Total Project Cost: \$225,339

The Town of Taylor, Arizona, will complete Phase Two of a system-wide water meter replacement program and conversion to radio-read documentation and billing. Additionally, Taylor will install water meters on the remaining 20 town-owned buildings, parks, and irrigation systems to allow them to accurately document the total amount of water being used to calculate total water loss. A system-wide water meter replacement program was identified as the town's top priority on its Capital Improvements Plan priority list.

California

Anderson-Cottonwood Irrigation District, Water Conservation and Efficiency Conversion to Pipeline Project

Reclamation Funding: \$100,000 Total Project Cost: \$223,913

The Anderson-Cottonwood Irrigation District, located in northern California, will convert 2,000 linear feet of Lateral 3 and sub-lateral 3.6 from an open earthen canal to a buried polyvinyl chloride pipeline. The pipe installation will eliminate evaporation and seepage losses, reduce spills, and provide better water management and conservation. The project is also expected to result in reduced electricity costs due to pumping from the Sacramento River. The project addresses the goals and objectives of the Anderson-Cottonwood Irrigation district Main Canal Modernization Project to facilitate improved water management and efficiencies while reducing Main Canal seepage losses and tailwater spills.

Bard Water District, Supervisory Control and Data Acquisition Installation Project Reclamation Funding: \$100,000 Total Project Cost: \$227,225

The Bard Water District, located in southeastern California, will automate ten existing gate structures by installing solar-powered supervisory control and data acquisition (SCADA) units on the Cocopah Canal. The automated gates will reduce operational losses during filling and delivery, minimize the risks of cross-contaminating irrigation water, and reduce the labor required for on-site monitoring during delivery. The project will help the district accomplish priorities identified in the district's Water Conversation, Drought Contingency Plan, and Capital Improvement Plans.

Carmichael Water District, Turf Removal Incentive Program Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The Carmichael Water District, located near Sacramento, California, will support outdoor water conservation by providing rebates to commercial customers to remove turf and replace it with water-efficient landscaping. Increased program capacity will incentivize additional landscape conversions and increase water use efficiency. The project supports the planning efforts of the 2018 American River Basin Integrated Regional Water Management Plan and meets the conservation and efficiency objectives of the district's 2020 Urban Water Management Plan.

City of Anaheim, Central Anaheim Smart Irrigation Controller Project Reclamation Funding: \$100,000 Total Project Cost: \$222,430

The City of Anaheim, located in Orange County, California, will replace inefficient irrigation systems with weather-based irrigation controllers and sensors in 10 public parks in north-central Anaheim. The project will enable the City to reduce overwatering by utilizing local weather and

landscape conditions to customize water schedules to actual conditions on-site. The project meets the water efficiency enhancement recommendations made by the City of Anaheim 2020 Urban Water Management Plan and Water Reduction Plan I.

City of Big Bear Lake, Pontell Hydropneumatic System Project Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The City of Big Bear Lake, Department of Water and Power, located in Southern California, will construct a hydropneumatic system at the Pontell Booster Pump station. The system will include a pressurized tank, piping, and control system. The project will help the city improve the efficiency of the existing booster station by regulating system pressures and providing an efficient water supply to meet water system demands quickly. The 2021 Water Master Plan supports the project, and The Pontell Hydropneumatic System Project is specifically identified as a priority pumping facility improvement.

City of Hemet, Landscape Irrigation Controller Rebate Program Reclamation Funding: \$100,000 Total Project Cost: \$200,052

The City of Hemet, located in Riverside County, California, will support outdoor water conservation by providing rebates to incentivize residential and commercial properties to install weather-based irrigation controllers. Approximately 30 percent of the city's potable water consumption is used to irrigate ornamental landscapes making this project a priority conservation strategy for the city. The rebate program is identified in the city's 2022 Water Conservation Plan and other measures captured in recent updates to the city code.

City of Millbrae, Drought-Tolerant Landscaping Reclamation Funding: \$100,000 Total Project Cost: \$229,586

The City of Millbrae, in San Mateo County, California, will install drought-tolerant landscaping at the city's police department and fire station buildings. This project will include changing approximately 8,000 square feet of turf area into a drought-tolerant landscape and replacing the existing sprinkler head irrigation systems with a drip irrigation system with meters, reducing potable water use for irrigation purposes. The city's 2020 Adopted Urban Water Management Plan includes the city's water use projections incorporating the effect of conservation measures, including landscape water budgets, which align with the project objectives.

City of Pleasanton, City of Pleasanton Eco-Friendly Lawn Conversion Rebate Project Reclamation Funding: \$45,000 Total Project Cost: \$90,000

The City of Pleasanton, located in Alameda County, California, will expand its efforts in the city's Eco-Friendly Lawn Conversion Rebate Program to reduce long-term potable water demands by offering rebates to water customers to convert their lawns to drought-tolerant landscaping.

Increased program capacity will incentivize additional landscape conversions and help improve the city's potable water supply reliability. The city's 2020 Urban Water Management Plan identifies lawn conversion as one of the city's measures to reduce long-term potable water demand.

City of San Buenaventura, Expanding Turf Removal Rebate Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The City of Buenaventura (Ventura), located northwest of Los Angeles, will provide additional turf replacement rebates to its residents and increase the amount offered from \$2.00 per square foot to \$2.50 per square foot. All of the city's water sources are under restrictions, increasing the need for the city to implement outdoor water conservation measures that will have short-term and long-term benefits. The project is supported by the City of Ventura's 2020 Urban Water Management Plan provides the framework to help guide Ventura's water supply management and conservation actions.

Crescenta Valley Water District, Water Meter Enhancement Advanced Metering Infrastructure Project

Reclamation Funding: \$100,000 Total Project Cost: \$222,209

Crescenta Valley Water District, located north of Los Angeles, will upgrade eighty-five water meters with advanced metering infrastructure capabilities located at commercial properties, manufacturers, and irrigation sites within CVWD service area. AMI infrastructure will allow customers to easily access their water use data and receive near real-time alerts enabling them to make informed water use decisions and take timely action to address leaks and unexpected consumption. The AMI Project aligns with best management practices for metering in association with water conservation and water management in the CVWD Urban Water Management Plan and is consistent with state and local water plans.

Del Puerto Water District, Groundwater Well Remote Telemetry Program Reclamation Funding: \$99,750 Total Project Cost: \$210,950

Del Puerto Water District, located in central California, will install 45 flowmeters and data transmission equipment at existing groundwater wells within the district. This expands the district's existing SCADA network to include groundwater use and will allow the district to collect more complete data regarding water use and better manage the district's water supply. Once the project is complete, the district's customers will be better able to track their water supply and make informed decisions regarding when to use surface and groundwater to minimize drought-related impacts. The goals of the project support mitigation strategies for drought, climate change, over drafting, and subsidence in the district's 2019 Local Hazard Mitigation Plan.

Desert Water Agency, Desert Water Agency Grass Removal Program Reclamation Funding: \$100,000 Total Project Cost: \$201,000

The Desert Water Agency, located in Palm Springs, California, will offer rebates to users replacing turf grass with low water use landscaping. The reduced water demand in the service area will address aquifer overdraft and increase the resilience of water supply. Water conservation is listed as a priority in the 2015 Desert Water Agency's Water Management Plan and the 2018 Coachella Valley Integrated Regional Water Management Plan.

Georgetown Divide Public Utility District, Concrete Lining of Upper Canal Water Delivery System

Reclamation Funding: \$79,516 Total Project Cost: \$198,789

The Georgetown Divide Public Utility District, located northeast of Sacramento, California, will concrete line 1,500 feet of unlined canal. This project allows the district to improve water efficiency by eliminating canal scouring, seepage loss, and vegetation growth in these upper sections of the canal, thus improving overall water supply reliability for its customers. The canal sections were identified in district's Capital Improvement Plan as areas with significant loss in need of lining to improve customer water supply reliability.

Palmdale Water District, Water Use Efficiency Rebate Program Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The Palmdale Water District, north of Los Angeles, will offer a variety of water-saving incentives, including incentives for installing high-efficiency toilets, high-efficiency clothes washers, turf replacement, and weather-based irrigation controllers. This incentive will help the district reduce indoor and outdoor water use through an expansive water-saving program. The need for this program is established in the district's Strategic Plan and 2020 Urban Water Management Plan.

San Lorenzo Valley Water District, Water Meter Replacement Project Reclamation Funding: \$100,000 Total Project Cost: \$224,481

San Lorenzo Valley Water District, located in Santa Cruz County, California, will upgrade 522 meters with advanced metering infrastructure capabilities. AMI infrastructure will reduce water leakage, increase water conservation, improve operational efficiency, and increase energy efficiency. This project will help the district meet its demand management goals, as described in the district's Urban Water Management Plan and the Santa Margarita Groundwater Basin Groundwater Sustainability Plan, to increase water supply reliability and improve resiliency to drought.

San Luis Water District, Relift Canal and Third Lift Canal Monitoring Reclamation Funding: \$100,000 Total Project Cost: \$222,750

The San Luis Water District, located in central California, will install water level monitoring instrumentation and programmable logic controllers, at two canal locations in their irrigation system. The upgrades in canal operational data will allow the district staff to closely monitor canal levels and adjust gate setting to eliminate spills at the end of the canal and respond to unexpected operational issues quickly. These sensors and controllers will further the district's progress towards the goal of canal automation identified in their 2020 Water Management Plan goal of automating canal structures.

Shafter-Wasco Irrigation District, Energy Efficiency Improvement to Kimberlina Recharge Facility

Reclamation Funding: \$61,903 Total Project Cost: \$123,806

The Shafter-Wasco Irrigation District, located in northwestern Kern County, California, will replace three motor starters with variable frequency drives on recovery wells in the district's Kimberlina Spreading Grounds facility. The variable frequency drives will improve water management of the system by providing the ability to adjust flow control with a range of volume recovered from the wells. This project will accomplish priorities identified in the 2019 Poso Creek Integrated Regional Water Management Plan Update, as well as priorities listed in the Shafter-Wasco Irrigation District's Sustainable Groundwater Management Act planning efforts.

South Sutter Water District, Main Diversion Modernization Project Reclamation Funding: \$100,000 Total Project Cost: \$241,436

The South Sutter Water District, located north of Sacramento, California, will replace three existing diversion gates with new water control gates with integrated flow measurement. The district will also implement Supervisory Control and Data Acquisition to provide remote monitoring and control of the gates. The new gates will improve water management accuracy, reduce spillage, and enhance flow measurement capabilities. This project was developed in the district's 2020 Agricultural Water Management Pan and is established as a priority alongside other delivery system modernization efforts.

South Tahoe Public Utility District, Washoan and Acoma Operational Efficiency Improvement Project

Reclamation Funding: \$100,000 Total Project Cost: \$225,000

The South Tahoe Public Utility District, located in northern California, will install new pressure reducing valve stations and integrate them into the existing automatic supervisory control and data acquisition system. The project will enable more accurate pressure and flow readings for

an entire zone of water users, allowing for better water supply management, faster response to pressure issues, and reduced energy usage. The project is identified as a priority in the district's Capital Improvement Plan and addresses the goals of a district-wide water plan to improve the water delivery network and preserve groundwater resources to help with drought resiliency.

Stockton-East Water District, Eight Mile Dam Automation Project Reclamation Funding: \$100,000 Total Project Cost: \$200,000

Stockton East Water District, located in California's Central Valley, will upgrade a control structure with a new supervisory control and data acquisition controlled gate. The project will provide the district with increased safety along the canal, reduce spillage and create valuable data for long-term drought planning. Automating and installing a metered gate will enhance the operation and management of the district's agricultural water delivery system. The task of automating distribution or drainage system structures is a best management practice prioritized in the district's Reclamation Water Management Plan.

Turlock Irrigation District, Lateral 6 Water Control Structure Project Reclamation Funding: \$57,753 Total Project Cost: \$115,505

The Turlock Irrigation District, located in central California, will modify an existing water control structure on the Lateral 6 Canal and will install a new water control gate with flow measurement, motor control, and radio telecommunications. The new water control gate will modernize the current infrastructure, minimize water losses, improve operational efficiency, and increase water supply reliability. The project will accomplish priorities identified in the district's Agricultural Water Management Plan, which lists automation of canal control structures as the top priority to mitigate climate change impacts.

Utica Water and Power Authority, Lower Utica Canal Lining and Gaging Stations Project

Reclamation Funding: \$83,030 Total Project Cost: \$171,301

The Utica Water and Power Authority, located in Calaveras County, California, will line 1,800 feet of canal using reinforced concrete and add two gauging stations. The canal lining will reduce water loss due to seepage, vegetation penetration, and evaporation. The new gauging stations will help identify locations of water loss and improve system efficiency. This project is identified in Utica's 2020-2025 Capital Improvement Plan and its 2021 Local Hazard Mitigation Plan and has been identified as a priority by Utica's Board of Directors.

Western Municipal Water District, Drought-Tolerant Landscape Transformation for March Field Air Museum Project

Reclamation Funding: \$100,000 Total Project Cost: \$225,000

Western Municipal Water District, located in Riverside, California, will partner with the March Field Air Museum to replace approximately 20,000 square feet of turf landscaping with drought tolerant landscaping and an efficient irrigation system. The project will reduce overall water usage of imported water and improve Western's water supply efficiency and reliability. The project addresses Western's long-term goals of improving water efficiency in its landscaping, as established in Western's Water Efficiency Master Plan and Drought Contingency Plan.

Westlands Water District, 7-1 Pumping Plant Metering Project Reclamation Funding: \$100,000 Total Project Cost: \$208,000

The Westlands Water District, located in the Central Valley of California, will construct two vaults and will install magnetic flow meters at the district's 7-1 Pumping Plant to prevent water loss due to flow measurement discrepancies from the head works and on-farm deliveries. The measurement devices will allow the district to perform more accurate calculations of losses, resulting in more water being allocated, and will provide useful data to support lining the inlet canal to prevent seepage loss. The project is associated with Westside Subbasin's Groundwater Sustainability Plan (GSP) management actions to allocate and manage groundwater extractions among water users to avoid undesirable results.

Colorado

Central Colorado Water Conservancy District, Northeast Colorado Augmentation Automation Efficiency Project

Reclamation Funding: \$100,000 Total Project Cost: \$223,525

The Central Colorado Water Conservancy District, in Greeley, Colorado, will install 150 advanced monitoring equipment with supervisory control and data acquisition (SCADA) at irrigation wells within the South Platte Alluvial Aquifer. These flow data reporting units will give water resource and farm managers important water quantity measurements with incredible speed and accuracy. The meters will provide water managers with data to help reduce water consumption, optimize irrigation water applications, ensure water reporting accuracy, and meet regulatory allocations. This project supports the district's augmentation plans.

City of Las Animas, Improving Water Efficiency Through Smart Water Meters Reclamation Funding: \$99,990 Total Project Cost: \$224,580

The City of Las Animas, located in southeastern Colorado, will upgrade 1,270 residential and commercial manually read water meters with new radio-read water meters. The new radio-read

water meters will improve the accuracy of water usage readings, reduce labor hours, and improve meter performance, efficiency, and sustainability. This project is a priority in the City's Preliminary Engineering Reports from 2007 and 2011 for the City's water system.

Colorado Springs Utilities, High Efficiency Toilets for Affordable Housing Reclamation Funding: \$100,000 Total Project Cost: \$224,767

Colorado Springs Utilities, located in Colorado Springs, Colorado, will identify affordable housing properties with above-average water use and install 570 ultra-high efficiency toilets to replace the existing older, inefficient toilets. The project will benefit low-income customers by reducing their annual water costs and improving per capita multi-family water use. This project was established as a priority in the Colorado Water Conservation Board's 2022 Water Efficiency Plan and is part of an Affordable Housing Multi-Family Rehab Project.

Dave Miller Mutual Ditch Company, Ditch Piping Project Reclamation Funding: \$84,325 Total Project Cost: \$225,000

The Dave Miller Mutual Ditch Company, located in Lyons, Colorado, will realign and pipe 5,000 feet of existing open ditch with plastic piping. The project will conserve water by reducing seepage and evaporation losses. Maximizing efficiency and minimizing losses will increase the irrigation season for irrigators dependent on this water supply. The project will accomplish priorities identified in the St. Vrain and Left Hand Water Conservancy District Stream Management Plan, which identifies the need for improved infrastructure efficiencies in the watershed.

Dolores Water Conservation District, Full-Service Acres Meter Upgrades Reclamation Funding: \$100,000 Total Project Cost: \$200,715

Dolores Water Conservation District, located in southwestern Colorado, will improve the measurement accuracy and increase real-time water management of surface water deliveries by upgrading to electromagnetic meters for water measurement. Electromagnetic meters will improve the accuracy of the measurement of water deliveries, provide real-time water management capability, and reduce routine mechanical meter maintenance. Measuring water as accurately as possible is a priority consistent with and furthers the goals of the Dolores Project Drought Contingency Plan.

Lincoln County, Improving Water Efficiency Through Smart Water Meters Reclamation Funding: \$83,100 Total Project Cost: \$166,320

Lincoln County, located in southeastern Colorado, will replace all of the City of Karval's manual read water meters with smart radio-read meters. The installation of 66 radio-read water meters will improve the accuracy of water usage reading, reduce labor hours, improve efficiency, and

help to identify leaks and pipe breaks more rapidly. This project is identified in an engineering report that evaluated the entire water system in the city.

Purgatoire River Water Conservancy District, Water Control Gates for Water Efficiency Reclamation Funding: \$62,400 Total Project Cost: \$124,800

The Purgatoire River Water Conservancy District, located in southern Colorado, will replace three manually controlled headgates with new automated headgates within the Picketwire Ditch and John Flood Ditch. This project will increase water use efficiency by improving the timing of changes to river diversions, providing for more consistent diversion rates, and reducing the workforce to manually make these changes. The project is supported by the 2020 River Assessment Report, completed by the Purgatoire River Partnership through a WaterSMART Cooperative Watershed Management Program grant.

Town of Larkspur, Improving Water Efficiency Through Smart Water Meters Reclamation Funding: \$33,500 Total Project Cost: \$67,498

The Town of Larkspur, in Douglas County, Colorado, will upgrade 120 water meters with radio read meters with advanced metering infrastructure (AMI) capabilities, reading equipment, software, and training. AMI infrastructure will allow for easier access to water use data and receive real-time alerts, enabling customers to make informed water use decisions and take timely action to address leaks and unexpected consumption while reducing labor hours and improving system efficiency. The updated meters will address recommendations included in an engineering report prepared for the Town to evaluate water supply reliability.

Town of Starkville, Improving Water Efficiency Through Smart Water Meters Reclamation Funding: \$99,990 Total Project Cost: \$218,615

The Town of Starkville, located in southern Colorado, will replace 65 existing meters with new radio-read meters and the corresponding software for remote meter reading. The updated metering infrastructure in this disadvantaged community will help conserve water, reduce water losses, and provide more equitable water bills for the community. This project will assist the Town in steadily executing the water system improvement plan laid out in an engineering report prepared for the Town to evaluate water supply reliability.

Idaho

Boise Project Board of Control, Automation of Arena Canal and Arena Lake Drain Reclamation Funding: \$43,790 Total Project Cost: \$87,580

The Boise Project Board of Control (BPBC), in Boise, Idaho, will install and automate two gates at the Arena Canal and Arena Lake Drain and connect the two gates to a Supervisory Control And Data Acquisition (SCADA) system. The project will help the BPBC stabilize and keep the Arena Canal at a steady height; control flows and conserve water at the headworks of the Arena Lake Drain; improve the efficiency of use of the water in the irrigation system; and prevent loss from spills and overflows. The project is supported by BPBC's Water Conservation Plan goal to address the installation of appropriate water measurement devices to ensure water is not being lost to excess deliveries.

City of Cascade, Real-Time Water Metering for Increased Efficiency Reclamation Funding: \$100,000 Total Project Cost: \$251,335

The City of Cascade, located in Valley County, Idaho, will replace the City's water meters with real-time water metering technology on all residential and commercial units within the city limits. This technology gives the City and its water users the ability to discover and address leaks immediately, track water use and significantly increase water use efficiency. This project is a top priority in the City's Water Conservation and Management Strategy.

Farmers Friend Irrigation Company, Headgate Automation - Phase I Reclamation Funding: \$31,500 Total Project Cost: \$63,595

The Farmers Friend Irrigation Company, located in eastern Idaho, will install eight automated headgates and connect them to a Supervisory Control And Data Acquisition (SCADA) system. This system will provide the Company and water users with safer operations, water use efficiency, and operational improvements throughout the irrigation system. The water flow information from the SCADA system will allow irrigators to receive the correct amount requested. This project addresses the main objective of the Farmers Friend Irrigation Company Water Conservation and Management Plan, Headgate Automation.

Fremont-Madison Irrigation District, Main Water Control Structures and Flow Measurement Station

Reclamation Funding: \$43,583 Total Project Cost: \$87,165

The Fremont-Mason Irrigation District, located in eastern Idaho just west of the Teton Range, will install remote operating equipment on three main water control structures. This equipment will allow the district to access data and control the diversions remotely through their supervisory control and data acquisition system. This project includes coordination with three

canal companies that receive water from the district. Canal automation was identified as one of the most cost-effective means of conserving water in the 2015 Henrys Fork Basin Study, which was coordinated and completed with the help of several partners, including the Bureau of Reclamation.

Idaho Irrigation District, Headgate Automation and Irrigation Flow Measurement Projects

Reclamation Funding: \$100,000 Total Project Cost: \$224,761

The Idaho Irrigation District, located in southern Idaho, will automate four existing headgates and add five supervisory control and data acquisition (SCADA) measuring and logging stations. Automating the headgates will maintain a consistent flow through the main canals and the laterals and help control flooding issues at the end of the ditches. Installing additional measuring and logging stations will provide accurate measurements of the water flowing through the system and allow for better management. The project will address two objectives in the Idaho Irrigation District Water Conservation and Management Plan, including an increase in water conserved and the ability to analyze where water is flowing and needed most thought out the system.

Island Ward Canal Company, Automated Headgate Installation Project Reclamation Funding: \$23,890 Total Project Cost: \$47,781

The Island Ward Canal Company, located between Idaho Falls and Rexburg, in partnership with the Fremont-Madison Irrigation District, will install a new headgate with automation and remote operation equipment. The project will help the company manage water more efficiently, bolster partnerships, and promote conservation within the service area. Canal automation was identified as one of the most cost-effective means of conserving water in the 2015 Henrys Fork Basin Study, which was coordinated and completed with the help of several partners, including the Bureau of Reclamation.

Minidoka Irrigation District, Minidoka Irrigation District's Piping of Lateral 24 Reclamation Funding: \$71,971 Total Project Cost: \$143,943

The Minidoka Irrigation District, located in Rupert, Idaho, will convert 1,420 feet of an earthen canal to buried pipe. Due to the nature of the surrounding soil types, significant amounts of sand blow into the lateral and significant water loss in the area. Converting the canal will conserve water and improve service reliability by allowing for better water control. This upgrade will implement a part of the district's Conservation plan to reduce our water use by heightened water conservation through improved or enhanced infrastructure.

North Fremont Canal Systems Inc, Canal Lining Project Reclamation Funding: \$51,500 Total Project Cost: \$51,500

The North Fremont Canal System Inc. (NFCS), located in eastern Idaho, will line 2,400 feet of the Marysville canal lateral with a geomembrane in a section of the canal prone to excessive seepage and flood risk. Water conservation will help alleviate the strains on the droughtstricken watershed and basin, benefiting the junior water rights holders and the watershed's health. This type of project is identified as a priority in the Henrys Fork Basin Study 2015 and identified in the Henrys Fork Drought Management Plan of 2018.

Parks and Lewisville Irrigation Company, SCADA Installation Project - Phase I Reclamation Funding: \$100,000 Total Project Cost: \$200,000

The Parks and Lewisville Irrigation Company, located in eastern Idaho, will install new solar powered supervisory control and data acquisition (SCADA) controlled headgates, overshot gates, and trash diverters at the end of the three main laterals of the Parks and Lewisville Canal. The automation improvements provide the ability to monitor and control the ends of the laterals and are important for efficiently managing the entire system. Monitoring and automation of water delivery accomplish a general goal in the Parks and Lewisville System Optimization Plan.

Water District 63, Real-Time Monitoring Implementation Project Reclamation Funding: \$74,185 Total Project Cost: \$148,371

Water District 63, located in southern Idaho, will automate the current manual flow monitoring system on 64 diversion channels along the Boise River. The new system will provide real-time monitoring data via a web-based platform, increasing the frequency of data collection from weekly to hourly, improving data accuracy, and shortening Watermatsers' incident response time. This project is supported by the Idaho State Water Plan and directly aligns with the purpose of the plan to better conserve, manage, and use Idaho's water resources.

Montana

Pondera County Canal and Reservoir Company, Flowmeter Upgrades for Automation Reclamation Funding: \$24,675 Total Project Cost: \$49,351

The Pondera County Canal and Reservoir Company (PCCRC), located in western Montana, will upgrade 38 existing flow meters with digital registers for automated reading. The project will help minimize delivery inefficiencies and provide the PCCRC with more robust water management capabilities. The project accomplishes a goal of the PCCRC's Board of Directors Water Conservation Plan to increase water delivery efficiency, potentially reducing water users' current restrictions.

North Dakota

City of Watford City, Watford City Advanced Metering Infrastructure - Phase I Reclamation Funding: \$100,000 Total Project Cost: \$224,837

The City of Watford City, located in McKenzie County, North Dakota, will install a telemetry base station and add smart transmitters to 636 existing municipal water meters. The project will provide more accurate data to the City, helping to control water loss, identify and respond to water leaks and water usage spikes more efficiently, and provide customers access to real-time water usage data through an online portal. The City's priority is to improve the water meter network and reading processes as outlined in the Watford City 2040 Infrastructure Master Plan.

New Mexico

Elephant Butte Irrigation District, Leasburg Canal Gate Actuators and Metering Station

Reclamation Funding: \$94,710 Total Project Cost: \$214,051

The Elephant Butte Irrigation District, located in the Mesilla and Rincon Valleys, will install two electric motor actuators to an existing check structure and construct a new metering station in the Leasburg Main Canal. The automated metering station improvements will allow the district to better control diversion flow rates, upstream water pressure, and downstream flow. The project will accomplish priorities identified in the Lower Rio Grande Regional Water Plan and 2017 Regional Water Plan as a Strategy to Preserve Agriculture to maximize the benefit of the Rio Grande Project surface water.

Nevada

Moapa Valley Water District, Water Meter and Data Collection System Upgrade Reclamation Funding: \$100,000 Total Project Cost: \$213,350

The Moapa Valley Water District, located northeast of Las Vegas, Nevada, will upgrade 400 domestic meters with new meters coupled with cellular endpoints for improved data analytics and water management. The project will increase efficiency in district's distribution system and help achieve quality drinking water for its users through efficient management and conservation. This project meets the goals of the Water Conservation Plan and the district's Capital Improvement Plan. Both plans emphasize the need to maintain the distribution system and manage the water recourses through conservation.

Southern Nevada Water Authority, Water Efficient Technologies Program Cooling System Upgrade Incentives

Reclamation Funding: \$95,000 Total Project Cost: \$206,000

Southern Nevada Water Authority (SNWA), located in Las Vegas, Nevada, will provide incentives to consumers through their existing water rebate program, Water Efficient Technologies Program, to upgrade commercial cooling systems in the City of Henderson. Leveraging alternative cooling technologies to upgrade commercial cooling systems improves water use efficiency and provides water savings for the Colorado River System. Implementing cooling efficiency standards is a focus area of the SNWA 2021 Water Resource Plan and supports the 2019 Southern Nevada Water Authority Joint Conservation Plan.

Truckee-Carson Irrigation District, Upgrade to Satellite Relay for Near Real-Time Data Acquisition

Reclamation Funding: \$100,000 Total Project Cost: \$220,717

The Truckee-Carson Irrigation District, located in Fallon, Nevada, will install solar-powered data loggers and transmitters at 31 existing metering locations. The new equipment will enable the district to manage water delivered more efficiently and use real-time data to prevent spills, theft, or over-delivery to downstream users. The project supports the district's Five-Year Strategic Plan, which identifies measurement, accounting, and reporting as a way to increase operational efficiencies.

Virgin Valley Water District, Water Meter and Data Collection Upgrade Reclamation Funding: \$100,000 Total Project Cost: \$224,890

Virgin Valley Water District, located in Clark County, Nevada, will upgrade 500 domestic water meters with advanced metering infrastructure (AMI) capabilities. The new meters will help the district improve water management by providing consumers with near real-time alerts, which can be used to address leaks and unexpected consumption. The project implements water conservation tools identified in the district's 2007 Water Conservation Plan.

Oklahoma

Corral Kreek Water District, Advance Metering Infrastructure Project
Reclamation Funding: \$34,340 Total Project Cost: \$69,400

The Corral Kreek Water District, located in Northeast Oklahoma, will upgrade its water distribution metering to Advanced Metering Infrastructure (AMI) by purchasing and installing 98 Advanced Meter Readers and associated hardware and software. This AMI information will inform the district about water loss within the distribution system and increase water use

efficiency and customer awareness. This project also works toward meeting the goals of the Oklahoma Comprehensive Water Plan as set forth by the Oklahoma Water Resources Board.

Town of Calera, Updating Analog Water Meters with Efficient Smart Meters Reclamation Funding: \$85,149 Total Project Cost: \$193,163

The Town of Calera, located in Bryan County, Oklahoma, will upgrade 673 water meters with advanced metering infrastructure (AMI) capabilities. The installation of the new smart meters will allow critical operational control of the Town's water supply infrastructure and a more accurate estimate of water demands. The project supports the Town's planning efforts to upgrade the water system to be more efficient.

West Siloam Springs, Water Distribution System Advanced Metering Infrastructure Project

Reclamation Funding: \$99,000 Total Project Cost: \$201,600

The Town of West Siloam Springs, located in northeast Oklahoma, will purchase and install 455 Advanced Meter Readers and associated hardware and software to upgrade its current customer metering to an Advanced Metering Infrastructure. The upgraded metering infrastructure will conserve water, provide quicker detection of leaks, and reduce the resources needed to read the current meters manually. The project addresses the goals and objectives identified in the City's Capital Improvement Plan and the State of Oklahoma's Water Conservation plan.

Oregon

Arnold Irrigation District, River Diversion Gate Automation and Flow Measurement Reclamation Funding: \$28,668 Total Project Cost: \$60,835

The Arnold Irrigation District, located in Bend, Oregon, will modernize the Deschutes River main headgate to automate the existing radial gate to improve diversion flow measurement with a new supervisory control and data acquisition (SCADA) system. This project will allow the district to better manage and measure a highly fluctuating river flow that requires daily adjustments. The project addresses the goals and objectives identified in the district's 2022 Water Management and Conservation Plan and supports the U.S. Fish and Wildlife Service's Habitat Conservation Plan for Oregon Spotted Frog.

Van Brimmer Ditch Company, Van Brimmer Falvey Road Piping Project Reclamation Funding: \$100,000 Total Project Cost: \$221,414

The Van Brimmer Ditch Company, located in Klamath County, Oregon, will convert 1,000 feet of an open canal to 60-inch high-density polyethylene (HDPE) pipe. The project will benefit VBDC's water supply by eliminating the subterranean seepage, water lost in charging the ditch, and

evapotranspiration making more of its water available in the lower end of its system. Agricultural water conservation, including canal lining and piping projects, supports the water conservation goals of the Klamath Basin Study completed by Reclamation in partnership with the Oregon Water Resources Department and the California Department of Water Resources.

West Extension Irrigation District, Canal Automation and Monitoring Project Reclamation Funding: \$70,000 Total Project Cost: \$144,104

The West Extension Irrigation District, located in northeastern Oregon, will install three automatic supervisory control and data acquisition (SCADA) controlled gates within its Relocation Canal. The solar-powered gates will provide continual monitoring capabilities and automatic adjustment of flow rates to decrease daily water consumption. The project supports the goals of system automation as identified in the district's 2011 Water Management and Conservation Plan.

South Dakota

Belle Fourche Irrigation District, Sorenson 1.9 Lateral Buried Pipeline Project Reclamation Funding: \$99,452 Total Project Cost: \$199,438

The Belle Fourche Irrigation District, located in Butte County, South Dakota, will convert 3,600 feet of the unlined Sorenson 1.9 canal lateral into buried polyvinyl chloride pipeline (PVC). The project will provide a more efficient and reliable water delivery system and lessen the operating burden on the district. The project is part of the district's ongoing practice of upgrading and improving water storage.

Texas

City of Edinburg, Water Accountability Through Efficient Response Project Reclamation Funding: \$100,000 Total Project Cost: \$200,000

The City of Edinburg, located in Hidalgo County, Texas, will replace 500 residential water meters with smart meters. The smart meters will decrease the amount of daily water used and prevent water loss. The City will be able to better manage and track water usage, conserve water efficiently, optimize staff time, and positively impact the surrounding environment, including the Rio Grande River Basin. The project supports City's 2021 Five-Year Capital Improvement Program by furthering conservation efforts and infrastructure improvements.

City of Universal City, Water Meters for More Accurate Real-Time Water Usage Data Collection

Reclamation Funding: \$100,000 Total Project Cost: \$218,747

The City of Universal City, located near San Antonio, Texas, will upgrade 658 residential and commercial water meters with Advanced Metering Infrastructure (AMI) capabilities. AMI infrastructure will provide consumers with near real-time alerts, allowing them to address leaks and unexpected consumption. The project supports the City's Water Conservation Plan and larger regional conservation and mitigation strategies laid out in the Edwards Aquifer Authority Groundwater Conservation Plan.

Edwards Aquifer Authority, Municipal and Industrial Meter Upgrades for Automation Reclamation Funding: \$31,856 Total Project Cost: \$63,712

Edwards Aquifer Authority, located in southcentral Texas, will upgrade 21 municipal and industrial manual read flowmeters with digital registers and the capacity to communicate with the district's existing supervisory control and data acquisition system. The meters will provide operational advantages to the district and improve data collected for water management. By automating the meter reading program, water permit holders will improve accuracy and real-time understanding of their water usage and help the district comply with water use regulations. The project satisfies a general goal of the district's Best Management Practices requiring water meters to be placed and read on municipal and industrial users.

El Paso County Water Improvement District No. 1, Montoya Laterals System Concrete Lining Project: Phase III

Reclamation Funding: \$100,000 Total Project Cost: \$216,386

The El Paso County Water Improvement District No. 1, located in El Paso County, Texas, will line 3,465 linear feet of the earthen Montoya Main Lateral using reinforced shotcrete. The upgrade will reduce water loss in the canal due to evaporation and seepage. The lining will also reduce sediment loading in the canal, improving the water delivered to irrigation customers. The Project is included in the 2017 Texas State Water Plan and received substantial support from stakeholders, including the City of El Paso and local organizations.

Harlingen Irrigation District Cameron County No.1, Adams Gardens Reservoir Improvements - Phase 2

Reclamation Funding: \$100,000 Total Project Cost: \$219,733

The Harlingen Irrigation District Cameron County No. 1, located in Cameron County, Texas, will upgrade the canal flow measurement instrumentation at the Adams Gardens River Pump Station with an acoustic doppler flowmeter and supervisory control and data acquisition controls. The improvements will allow the district to operate the Adams Gardens Main Canal at a higher level,

add storage and system capacity, and improve the system efficiency. The project is consistent with the 2021 Rio Grande Regional Water Plan, recognizing reservoir expansions, metering, and SCADA projects as proven water conservation practices.

Town of Van Horn, Water Meters and Automation for Increased System-Wide Water Use Efficiency

Reclamation Funding: \$94,346 Total Project Cost: \$188,691

The Town of Van Horn, located in Culberson County, Texas, will install 159 municipal water meters with advanced metering infrastructure (AMI) capabilities. The upgraded meters will provide improved system-wide data, allowing the Town to identify, locate, and address irregular water consumption and detect leaks faster. The project has been included as a recommended water management strategy in the Far West Texas Water Planning Group's 2025 Region E Far West Texas Water Plan.

Utah

Bear River Canal Company, Automated Diversion Gate System Reclamation Funding: \$100,000 Total Project Cost: \$220,930

The Bear River Canal Company (BRCC), located in northern Utah, will install automated control gates and control communications at three diversion sites within its water delivery system. The automated gates will allow BRCC to leverage science and technology to improve water supply reliability and increase efficiency levels throughout their canal system. This project will complement other automation improvements as identified and prioritized in the BRCC 2019 Water Conservation and Management Plan.

Draper Irrigation Co. (WaterPro), Culinary Smart-Metering Project Reclamation Funding: \$100,000 Total Project Cost: \$219,059

The Draper Irrigation Company, just south of Salt Lake City, Utah, will upgrade 566 culinary water meters to ultrasonic smart meters with cellular data transmission to improve reliability, accuracy, and efficiency in metering culinary service laterals. The installation will curb water loss by providing more accurate water data, which will help reduce high water usage and promote water conservation. The Company's Water Conservation Master Plan, updated in 2020, supports the implementation of meter upgrade projects.

Emigration Improvement District, Residential Water Meter Upgrade Reclamation Funding: \$70,000 Total Project Cost: \$145,000

Emigration Improvement District, located in Salt Lake City, Utah, will upgrade 220 residential water meters with ultrasonic meters with remote read technology in the Emigration Canyon,

where ice and snow prevent meter readings. The new meters will provide the district and its consumers with near real-time data, including temperature and water pressure monitoring yearround, reducing undetected leaks during winter months. The Emigration Improvement district Water Management and Conservation Plan include specific goals to protect water resources in the canyon where the meters are installed.

Haights Creek Irrigation Company, Haights Creek Irrigation Company Piping Project - Phase 8

Reclamation Funding: \$100,000 Total Project Cost: \$209,426

Haights Creek Irrigation Company, located in Kaysville City, Utah, will upgrade 1,020-feet residential transit distribution lines and service lines in an area identified as the Phase 8 location with new polyvinyl chloride distribution lines and high-density polyethylene pipe. In addition, the Company will install flow meters on each new residential service line. The project will reduce water loss by upgrading the existing lines and improving water use monitoring and leak detection. The project is the eighth phase of an activity listed as the top priority in Haights Creek's 2016 Water Conservation Management Plan.

Hyde Park City, Hyde Park City Reclamation Funding: \$100,000

Hyde Park City, located in Cache County, Utah, will upgrade 562 water meters in their domestic water distribution system with new meters coupled with cellular endpoints for improved data analytics and water management. The project will help the City increase efficiency in the distribution system by improving leak detection and water conservation efforts. Hyde Park City's Water Conservation Plan supports this project with the goal of continuing to exercise measures to ensure that water use is carefully monitored and appropriately used.

Total Project Cost: \$224,853

Washington County Water Conservancy District, Installing Smart Water Meters - Phase 2

Reclamation Funding: \$100,000 Total Project Cost: \$223,353

The Washington County Water Conservancy District, located in southwest Utah, will install water meters with advanced metering infrastructure (AMI) capacities for the end users of Ivins Irrigation Company at previously unmetered connections. This phase of the project will help residential users understand irrigation needs to manage water resource better. The project supports both the Washington County Water Conservancy district's Water Conservation Plan and the Ivins City's Water Conservation Plan to promote the use of new conservation techniques and the conservation of secondary water systems for irrigation purposes.

Washington Terrace City, Automatic Metering Infrastructure Installation Project Reclamation Funding: \$100,000 Total Project Cost: \$241,440

Washington Terrace City, located in Weber County, Utah, will upgrade 1500 residential and commercial water meters by installing advanced metering infrastructure (AMI) to collect water flow data and transmit it to the City analytics software system. The project will better manage the City's water supplies, promote conservation among its residential, commercial, and industrial customers, and automate its meter readings. The project supports Washington Terrace City in accomplishing specific goals and priorities outlined in the Washington Terrace City Water Conservation Plan for water conservation.

Wilson Irrigation Company, Canal System Automation Project - Phase 1 Reclamation Funding: \$99,597 Total Project Cost: \$199,194

Wilson Irrigation Company, located in northern Utah, will install electric actuators on three gates, level monitoring sites, and implement a supervisory control and data acquisition (SCADA) system for operation. The improvement of delivery technology will help the Company better manage its water supply, conserve water, make more efficient use of limited water supplies and improve relations between Company officers, watermaster, and stakeholders. The project is the highest priority in Wilson Irrigation Company's 2020 Water Conservation and Management Plan.

Washington

Chelan County, Yaksum Water Company Pipeline Replacement Project Reclamation Funding: \$87,007 Total Project Cost: \$174,013

The Chelan County Natural Resource Department, located in Wenatchee, Washington, will upgrade 3,500 feet of their distribution system to a buried 12-inch PVC pipeline. The project will provide a more efficient and reliable water delivery system by reducing seepage and allowing the County to deliver full shares of water to its customers. The project's goals of water conservation and increased instream flows are both listed as priority actions in the Wenatchee Watershed Management Plan and the Icicle Strategy.

City of Walla Walla, Municipal Master Smart Metering Project of Water System Districts/Zones

Reclamation Funding: \$100,000 Total Project Cost: \$237,000

The City of Walla Walla, located in southeastern Washington, will install eight master water meters dividing the city water system into four distinct district meter areas. The meters will allow for real-time flow monitoring that detects leaks within the distribution system, allowing the city to gather actionable data. This project supports the Walla Walla Water 2050 Plan that

integrates goals and solutions from the basin's diverse stakeholders in both Washington and Oregon to achieve a holistic and viable long-term plan for water use.

Columbia Irrigation District, Canal #2 MidCanal Automated Check Structure Reclamation Funding: \$75,000 Total Project Cost: \$160,913

The Columbia Irrigation District, located in Kennewick, Washington, will install four automated integrated flow measurement gates on Canal #2 and integrate them into the district's existing supervisory control and data acquisition (SCADA) system. Automating the canals will lead to greater safety, water savings, and improved service. The project addresses the district's main priority identified in the Comprehensive Water Conservation Plan of canal automation.

Quincy Columbia Basin Irrigation District, Automation of W38 Lateral Turnout of the West Canal

Reclamation Funding: \$30,758 Total Project Cost: \$61,516

The Quincy-Columbia Basin Irrigation district, located in central Washington, will install an automated and integrated flow measurement control gate at the headgate of the W38 lateral on the West Canal. This improved flow management will benefit the district and water users with more reliable water deliveries to farms, reductions in the use of aquatic weed chemicals and their spill to natural waterbodies, and operational cost savings by eliminating the need for manual adjustments. The project addresses the goals and objectives identified in the district's 2010 Columbia Basin Project Coordinated Conservation Plan.